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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,624	07/17/2000	Tim Carroll	068167.0104	8509

7590 03/30/2004
Steven J. Rocci
WOODCOCK WASHBURN LLP
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Philadelphia, PA 19103

EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
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2123

71

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/617,624

Applicant(s)

CARROLL ET AL.

Examiner

Dwin M Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8, 7, 6, 5 & 4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. **Claims 1-16** have been presented for examination. **Claims 1-16** have been examined and rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Independent **Claims 1, 2 and 6** and dependent **Claims 3-5 and 7-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Campbell U.S. Patent 6,452,599** in view of **Traut U.S. Patent 5,790,825**.

2.1 As regards independent **Claims 1, 2 and 6** the *Campbell* reference teaches emulation of VGA hardware (**Col. 2 Lines 53-67, Col. 3 Lines 1-14**), receiving an instruction related to the current VGA mode (**Figure 2, Col. 1 Lines 36-49**), a jump table (**Figure 4 Item 58**), pointing to an address and executing a function in the host environment (**Figure 8**).

However, the *Campbell* reference does not expressly disclose running a native emulation in a guest operating system.

The *Traut* reference discloses running a native emulation in a guest operating system **(Figure 1 Item 28)**.

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to have combined the VGA emulation of the *Campbell* reference with the instruction emulation of the *Traut* reference because, the ability to emulate a VGA adapter in software means that platform specific VGA hardware does not need to be developed for different operating systems, only a software emulation layer needs to be developed, which is cheaper and less expensive to develop and upgrade because all of the emulation is performed in software.

2.2 As regards dependent **Claims 3 and 7** the *Campbell* reference discloses different video modes **(Figure 2 & Col. 1 Lines 36-49)**.

2.3 As regards dependent **Claim 4** the *Campbell* reference discloses VGA memory buffers **(Col. 1 Lines 65-67 & Col. 2 Lines 1-4)**.

2.4 As regards dependent **Claim 5** "OFFICIAL NOTICE" manipulating pixels in video memory is known in the art.

2.5 As regards dependent **Claims 8-15** the *Campbell* reference discloses the manipulation of emulated VGA hardware registers, which include flags **(Figures 1-8 Col. Col. 3 Lines 43-67, Col. 4 Lines 1-67, Col. 5 Lines 1-55)**.

Conclusion

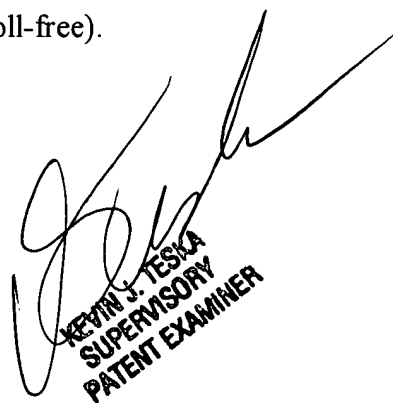
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,581,766 discloses a selectable video driver system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M Craig whose telephone number is 703 305-7150. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703 305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC


KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER